What is claimed is:

1. A method of manufacturing an EEPROM having a locally thin oxide film, comprising the following steps of:

forming a diffusion region in part of a memory cell in an active region on a silicon substrate;

forming the thickness of an oxide film on the diffusion region so as to become thicker than the thickness of each of oxide films each lying on an active region other than the diffusion region by oxidation treatment;

applying a resist and opening part thereof on the diffusion region and an active region in a peripheral transistor forming region other than the memory cell;

performing etching until the oxide film of the peripheral transistor forming region is removed by a dry etching method;

removing the oxide film remaining in the opening of the memory cell by a wet etching method; and

then removing the resist.

2. The method according to claim 1, wherein the EEPROM is a FLOTOX type.

3. The method according to claim 1, wherein oxidation on the diffusion region and oxidation on the

active region other than the diffusion region are simultaneously performed.

4. The method according to claim 3, wherein the oxidation on the diffusion region is enhanced oxidation.